

Gray County

8/31/2020

Background Statistics¹

Number of farms: 422

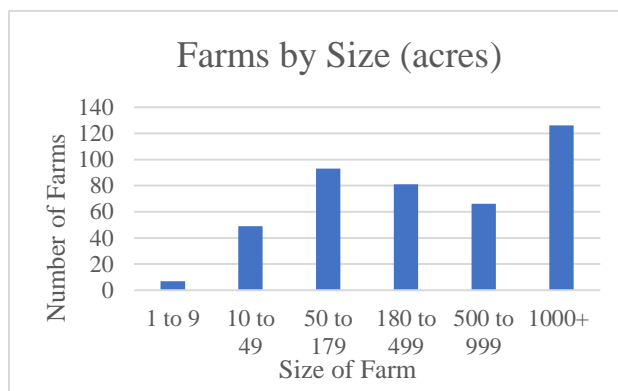
Average size: 1,318 acres

Land in farms: 556,070 acres

Average value of products sold per farm: \$2,347,519

Average net cash farm income per farm: \$280,592

1: Data from USDA 2017 Census of Agriculture



Estimated Economic Contribution of Agriculture and Agriculture Related Sectors to the Gray County Economy

Methodology

The estimated economic contribution of agriculture and agriculture related sectors was computed using the most recent IMPLAN data available (2018) adjusted for 2020. The IMPLAN modeling system was used to calculate the results of this analysis. The IMPLAN model was constructed so that double counting was avoided. For this report, 22 of the 71 agriculture and agriculture related sectors in Kansas were identified and analyzed to determine their overall contribution to the Gray County economy.

Results

These 22 sectors have a total direct output of approximately **\$576.8 million** and account for **1,046 jobs** in Gray County. Running the model for all 22 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Gray County Economy					
Contribution Type	Employment	% Employment	Total Value Added	% of Gross Regional Product	Output
Direct Effect	1,046	20%	\$119,000,000	26%	\$576,800,000
Indirect Effect	606	12%	\$54,300,000	12%	\$117,000,000
Induced Effect	313	6%	\$20,700,000	5%	\$40,700,000
Total Effect	1,964	38%	\$194,000,000	43%	\$734,500,000

NOTE: Individual effects may not equal the total effect due to rounding.

As shown in the above table, agriculture, food, and food processing sectors support a total of **1,964 jobs**, or **38%** of the entire workforce in the county. The total final sales of all products in these sectors is approximately **\$734.5 million**.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of Gross Regional Product (GRP). Total value added by the 22 agriculture, food, and food processing sectors is approximately **\$194.0 million**, or **43%** of the GRP.

Top Ten Sectors by Employment

Out of the agriculture and agriculture related sectors, beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming is the top employer with **431 jobs**. This table also illustrates the top ten sectors by total employment, including direct, indirect, and induced effects in Gray County.

Sector	Total Employment
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	431
Support activities for agriculture and forestry	222
Grain farming	188
Wholesale - Other nondurable goods merchant wholesalers	162
Truck transportation	115
Other real estate	78
All other crop farming	54
Animal, except poultry, slaughtering	34
Management of companies and enterprises	31
Individual and family services	27

Top Ten Sectors by Output

This table shows how much revenue is generated in other sectors by having a strong agriculture industry, including direct, indirect, and induced effects. The beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top contributor, with approximately **\$367.4 million** to the Gray County economy.

Sector	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	\$367,400,000
Grain farming	\$110,800,000
Wholesale - Other nondurable goods merchant wholesalers	\$44,400,000
Animal, except poultry, slaughtering	\$24,100,000
Truck transportation	\$17,400,000
Other real estate	\$14,500,000
Support activities for agriculture and forestry	\$14,400,000
Dairy cattle and milk production	\$13,100,000
Owner-occupied dwellings	\$9,700,000
Other animal food manufacturing	\$7,700,000

All Direct Sectors

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Gray County economy. IMPLAN sectors are assigned based on North American Industry Classification System (NAICS) codes. Generally, this analysis includes three categories; production, manufacturing/processing, and services. Note that this analysis does not include wholesale or retail sales of final products, or ethanol production.

Sector	Total Output	Total Employment
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	\$367,412,027.46	431.45
Grain farming	\$110,840,989.99	188.01
Animal, except poultry, slaughtering	\$24,101,564.62	34.11
Support activities for agriculture and forestry	\$14,435,172.52	221.96
Dairy cattle and milk production	\$13,055,876.90	18.99
Other animal food manufacturing	\$7,677,880.36	7.06
Oilseed farming	\$7,494,787.08	1.20
Fertilizer mixing	\$6,996,047.25	12.97
Animal production, except cattle and poultry and eggs	\$6,013,655.73	19.44
All other crop farming	\$5,450,935.88	53.90
Farm machinery and equipment manufacturing	\$5,119,636.27	12.98
Dog and cat food manufacturing	\$4,974,952.39	3.75
Landscape and horticultural services	\$1,499,063.87	21.27
Poultry and egg production	\$352,829.77	0.34
Veterinary services	\$338,742.87	3.09
Bread and bakery product, except frozen, manufacturing	\$268,127.46	2.20
Frozen cakes and other pastries manufacturing	\$181,085.26	2.20
Commercial logging	\$167,839.68	4.25
Commercial hunting and trapping	\$146,765.94	5.62
Other snack food manufacturing	\$137,211.69	0.28
Roasted nuts and peanut butter manufacturing	\$109,332.34	0.28
Forestry, forest products, and timber tract production	\$17,282.48	0.27

The following terms are used throughout the results shown in this report:

- **Direct effect:** the contribution from agricultural and food products
- **Indirect effect:** the contribution from farms and agricultural businesses purchasing inputs from supporting industries within the state
- **Induced effect:** the contribution from employees of farms, agricultural businesses, and supporting industries spending their wages on goods and services within the state
- **Value added** = labor income + indirect business taxes + other property type income
- **Gross Regional Product** = final demand of households + government expenditures + capital + exports – imports – institutional sales
- **Output** = intermediate inputs + value added
- **Employment:** full-time/part-time annual average i.e., 1 job lasting 12 months = 2 jobs lasting 6 months each = 3 jobs lasting 4 months each. A job is neither full-time nor part-time.. Due to confidentiality policies that exist within several agencies from which IMPLAN collects their data, some sectors in some regions may not have all data available.

For more information, contact the Division of Agricultural Marketing, Advocacy and Outreach Agency Economist
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